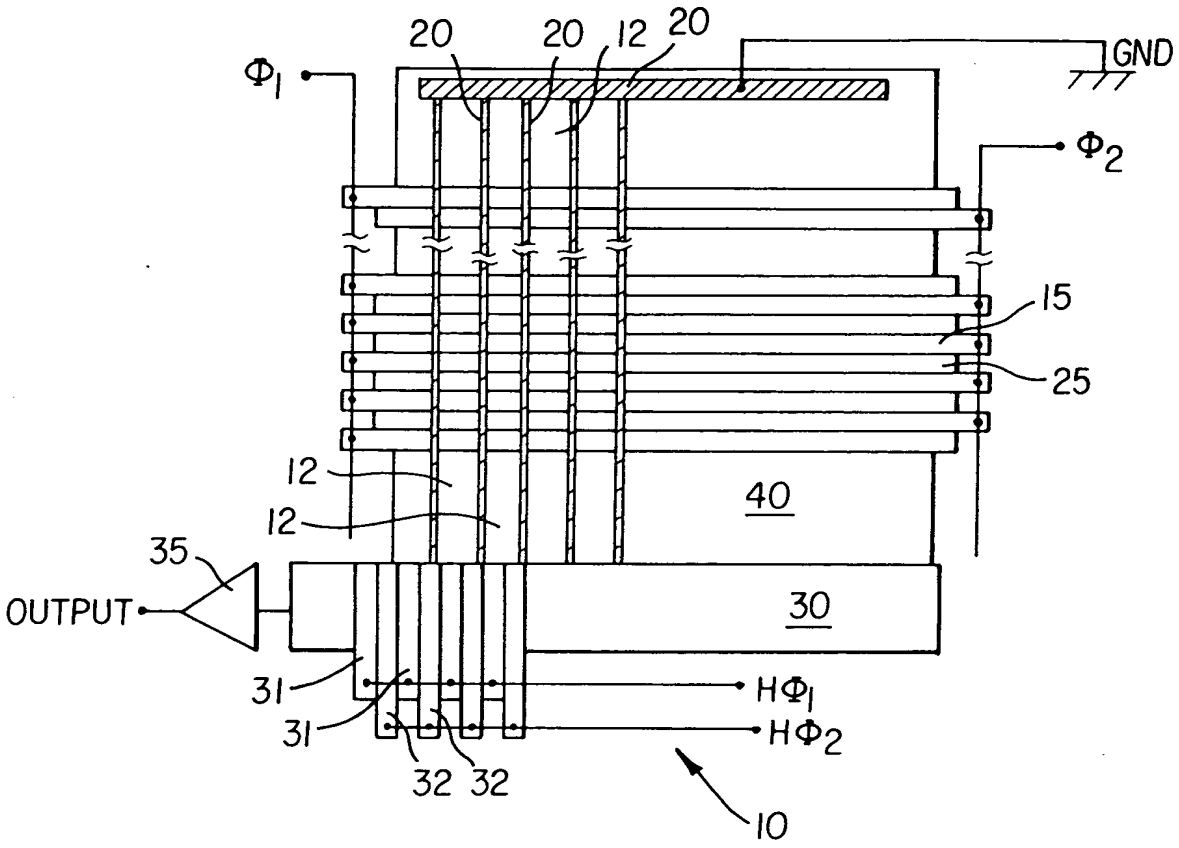

FIG. 1a

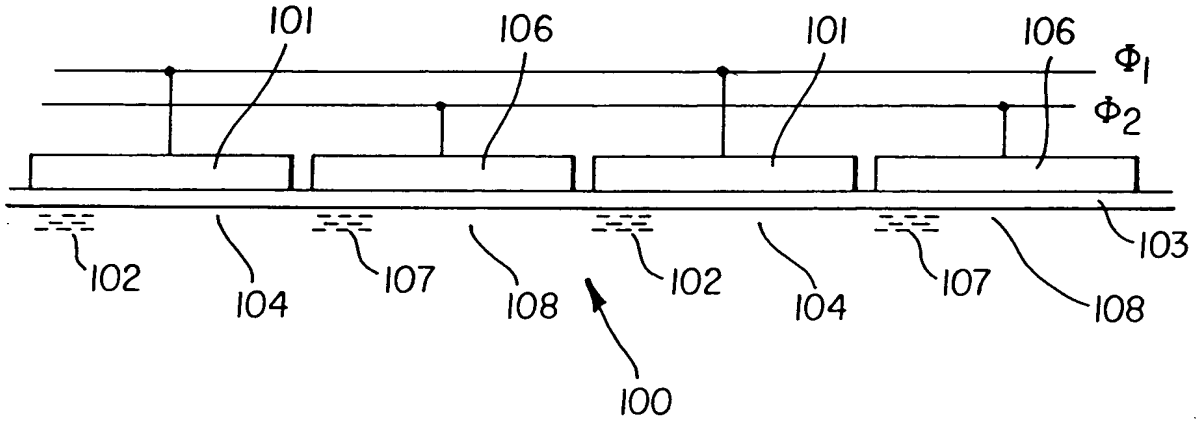
101
106
101
106
Φ1
Φ2
102
104
107
108
102
104
107
108
103
100

FIG. 1b

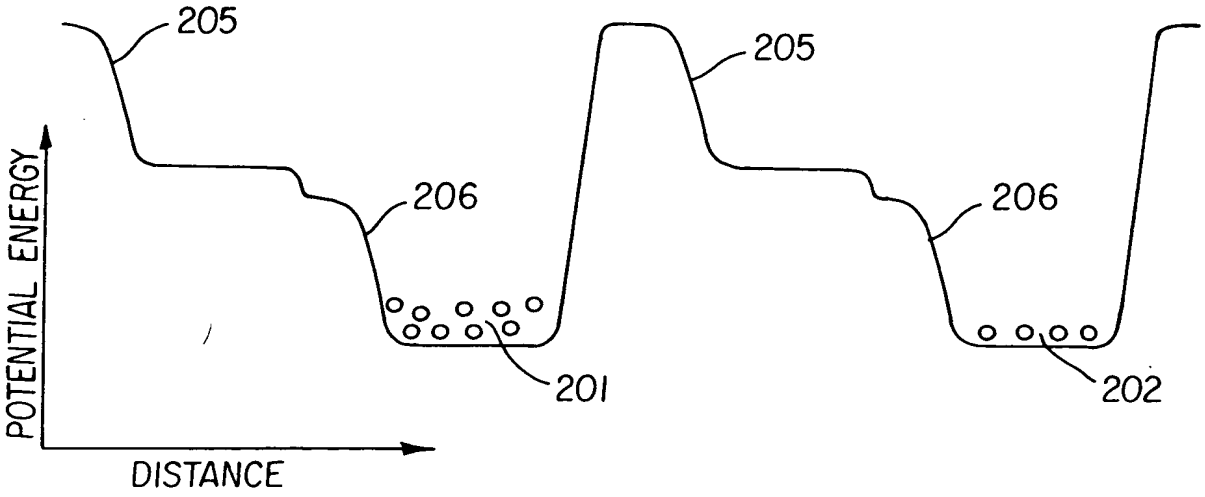
205
205
206
206
201
202
POTENTIAL ENERGY
DISTANCE

FIG. 1c

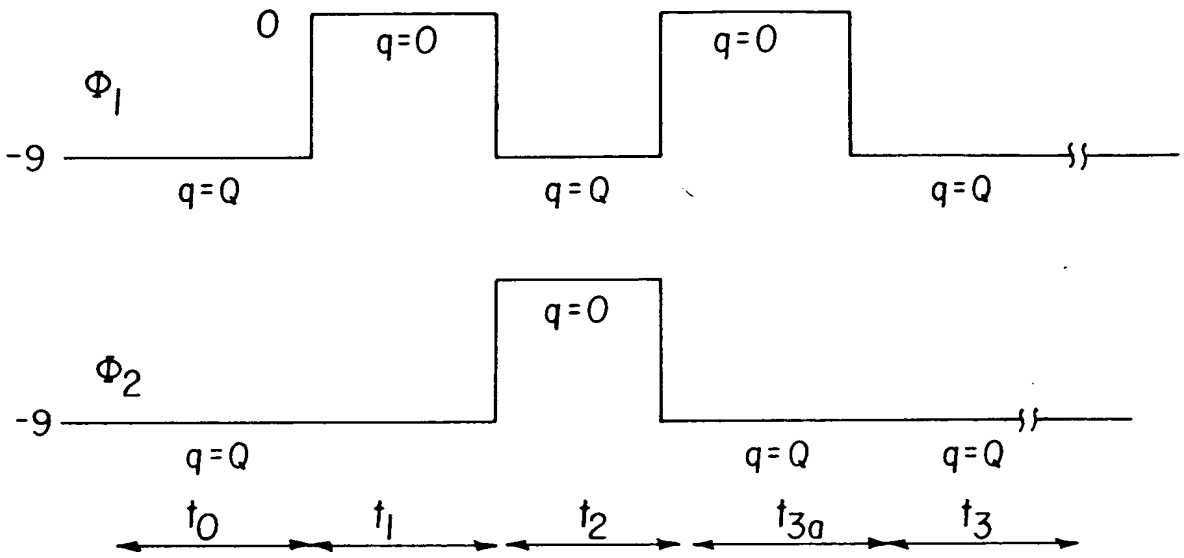

FIG. 2a
(prior art)

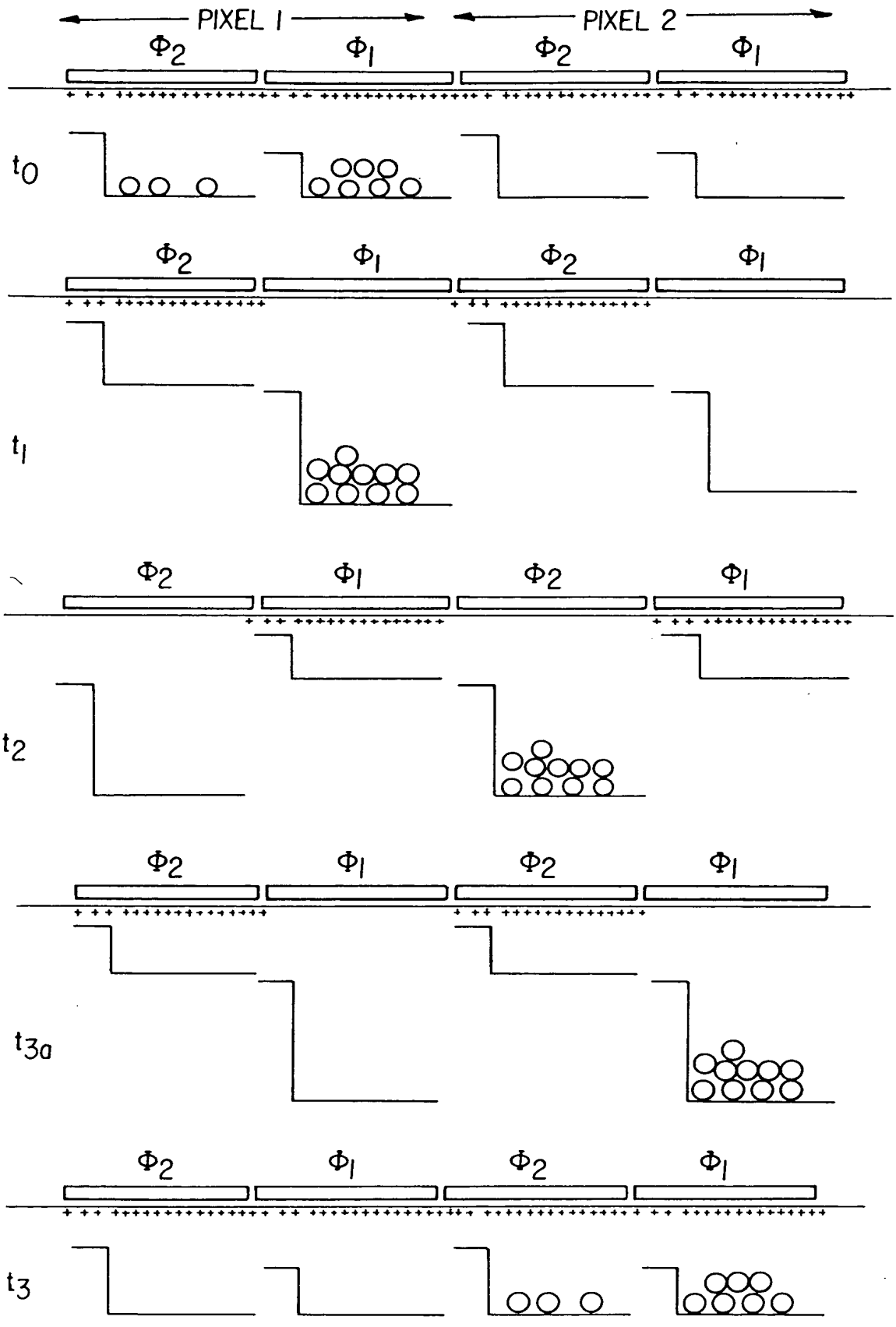

FIG. 2b (prior art)

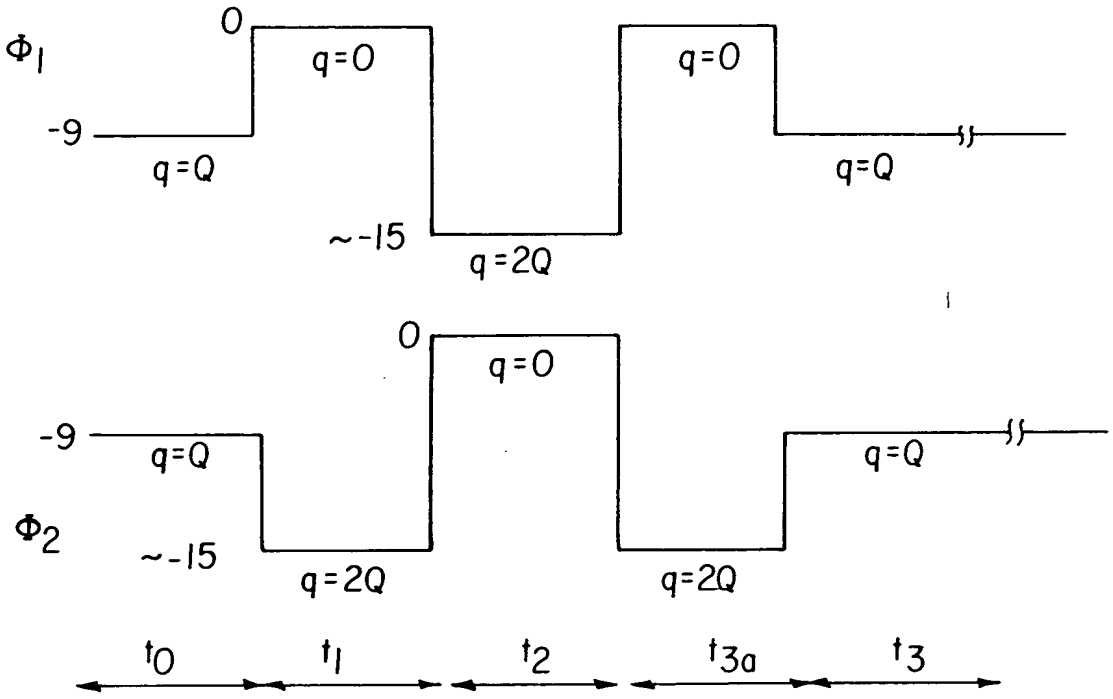

FIG. 3a

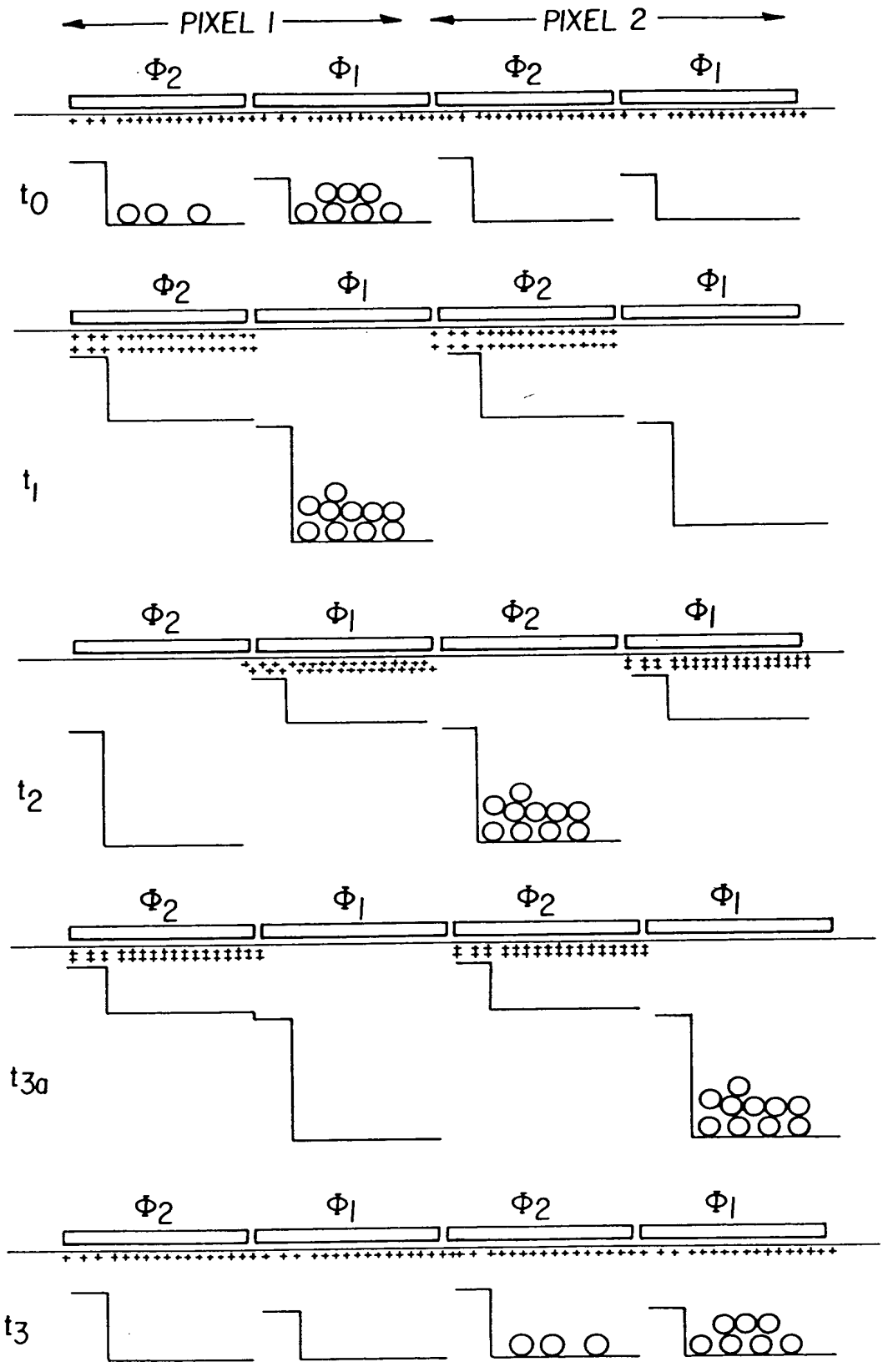

FIG. 3b

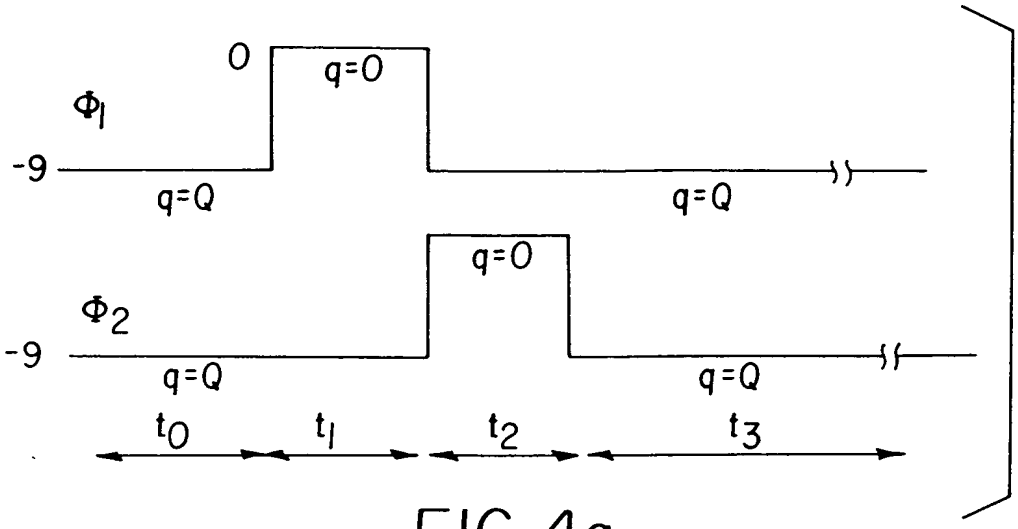

FIG. 4a
(prior art)

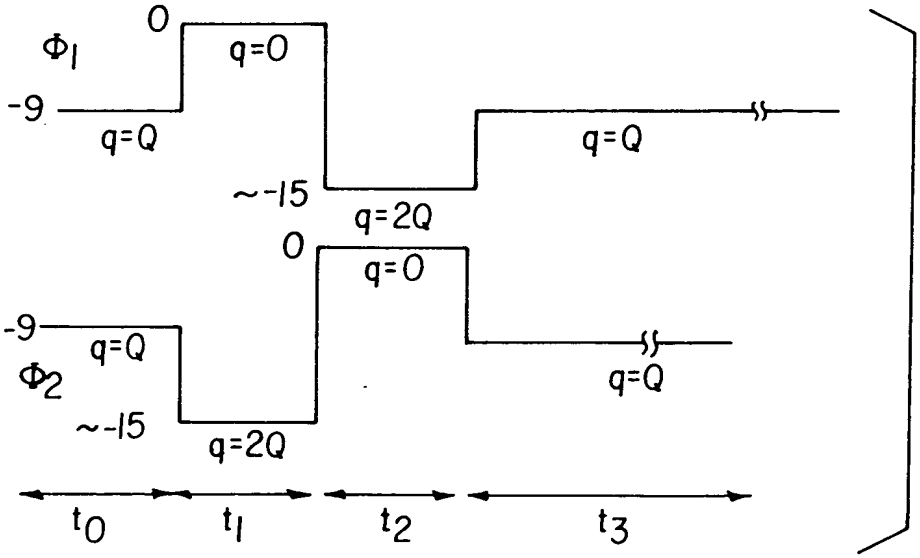

FIG. 5a

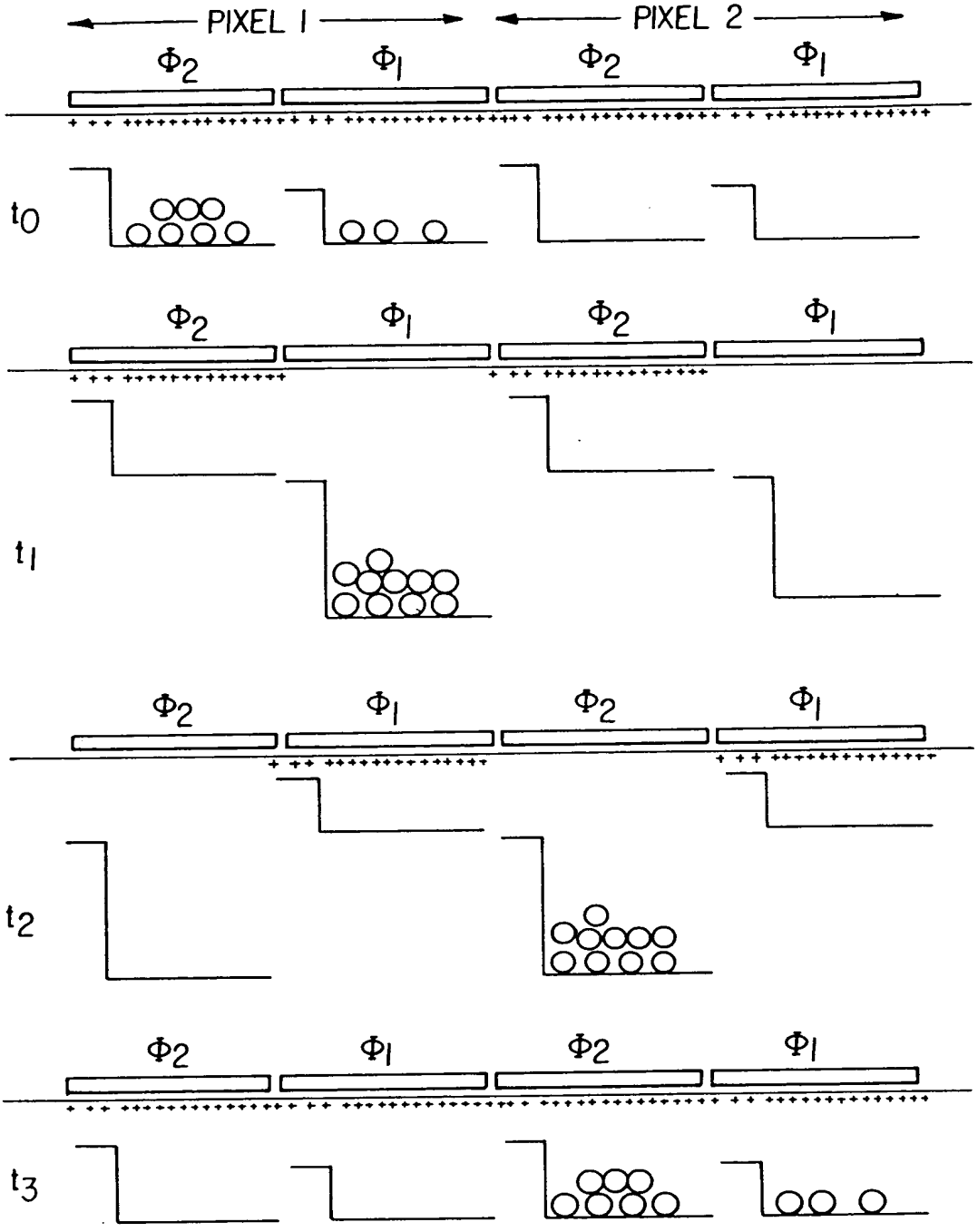

FIG. 4b
(prior art)

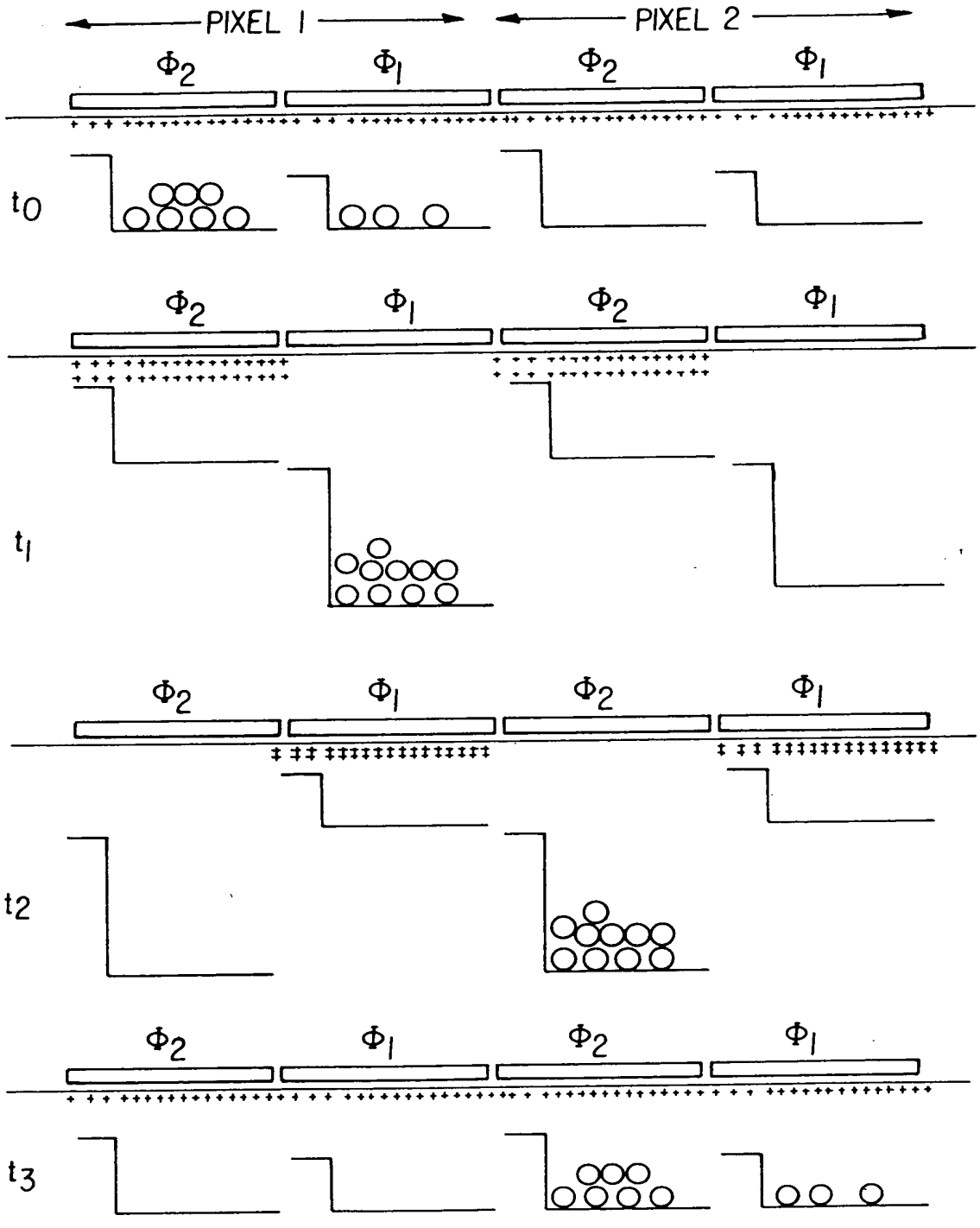
PIXEL 1
PIXEL 2
Φ2
Φ1
Φ2
Φ1
t0
Φ2
Φ1
Φ2
Φ1
t1
Φ2
Φ1
Φ2
Φ1
t2
Φ2
Φ1
Φ2
Φ1
t3

FIG. 5b

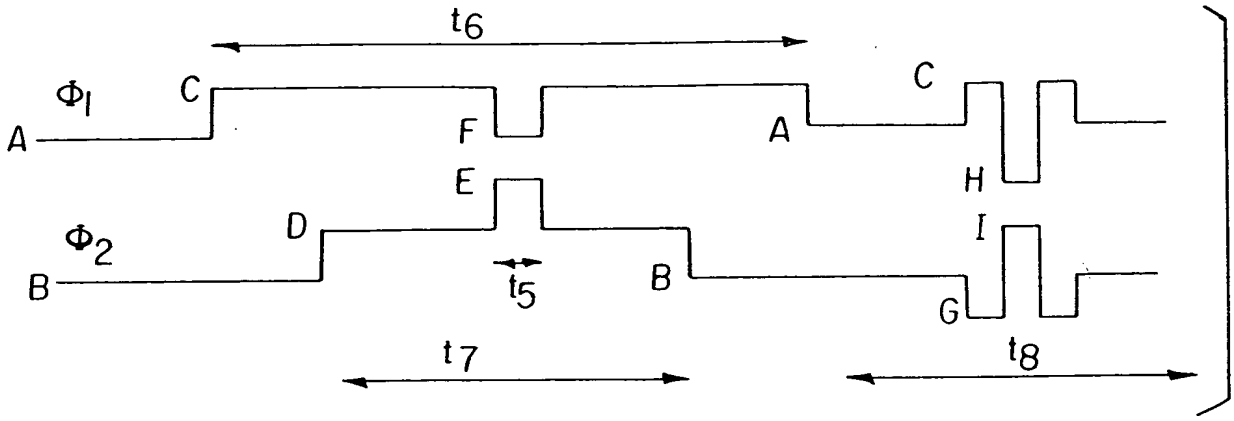
t6
Φ1
A
C
F
A
C
H
E
D
Φ2
B
t5
B
I
G
t7
t8

FIG. 6

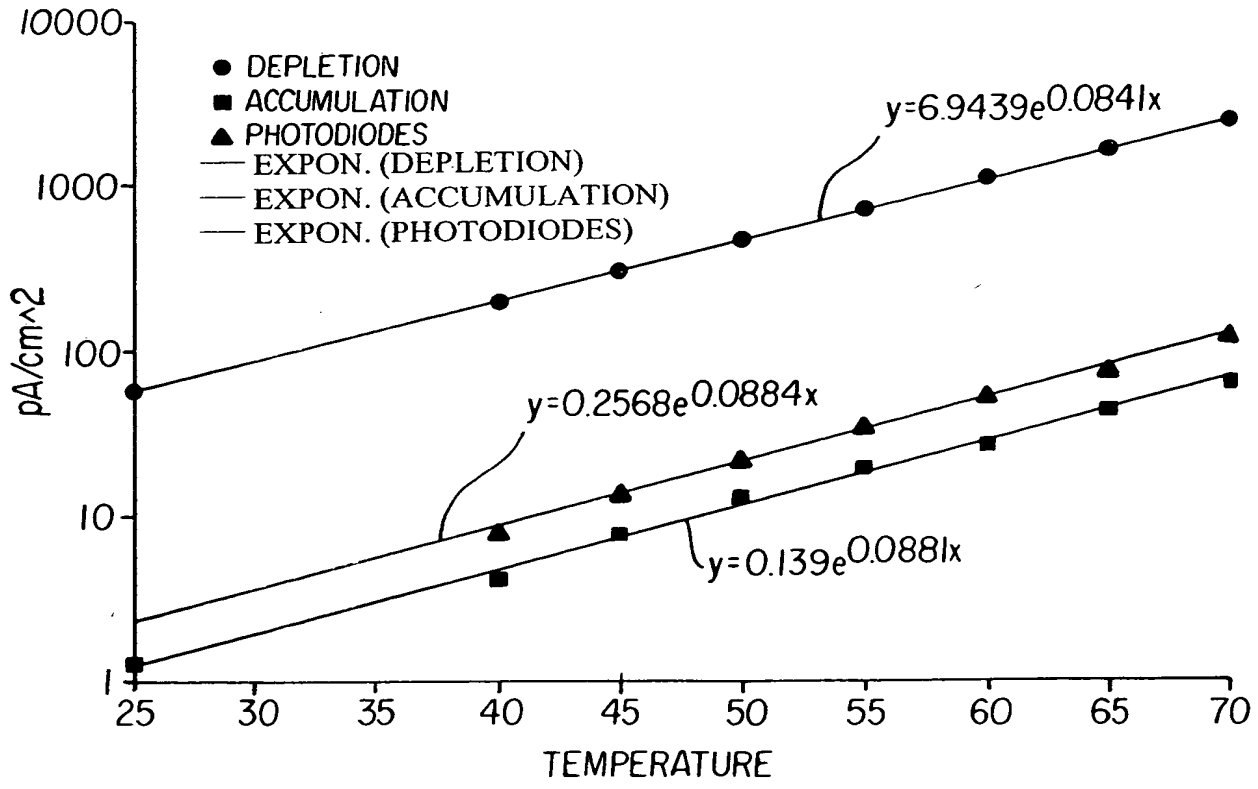
10000
1000
100
10
1
pA/cm^2
DEPLETION
ACCUMULATION
PHOTODIODES
EXPON. (DEPLETION)
EXPON. (ACCUMULATION)
EXPON. (PHOTODIODES)
y=6.9439e0.0841x
y=0.2568e0.0884x
y=0.139e0.0881x
25
30
35
40
45
50
55
60
65
70
TEMPERATURE

FIG. 7